



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,025	07/20/2004	Harald Kapitza	17102/008001	8513
22511	7590	09/08/2005	EXAMINER	
OSHA LIANG L.L.P. 1221 MCKINNEY STREET SUITE 2800 HOUSTON, TX 77010			PRESTON, ERIK D	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/502,025

Applicant(s)

KAPITZA ET AL.

Examiner

Erik D. Preston

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 9-13 is/are rejected.
- 7) ☒ Claim(s) 6-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-5 & 9-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Maher (US 3656018).

With respect to claim 1, Maher teaches a brush holder plate (Fig. 1, #16) comprising: Cartridges (Fig. 1, #20) and brushes (Fig. 3, #34) guided in the cartridges, wherein the guidance of the brushes takes place under spring loading (Col. 1, Lines 33-40) in the radial direction towards a central aperture (Fig. 1, #12) in the brush holder plate, and wherein the cartridges are disposed in such a way that they can be displaced on the brush holder plate from a radially outer position to a radially inner final assembly position (Col. 3, Lines 3-7). In the assembly process the cartridges are displaced in a radially inward direction through the brush holder lug openings (Fig. 1, #18).

With respect to claim 2, Maher teaches the brush holder plate of claim 1, wherein neither the cartridges nor the brushes project more than a slight degree into the aperture in the preassembly position (as seen in Fig. 3).

With respect to claim 3, Maher teaches the brush holder plate of claim 1, wherein holding means (Fig. 3, #48) hold the brushes in the cartridges in a radially outer position in the preassembly position.

With respect to claim 4, Maher teaches the brush holder plate of claim 3, wherein the brushes do not project out of the cartridges more than a slight degree in the preassembly position (as seen in Fig. 3).

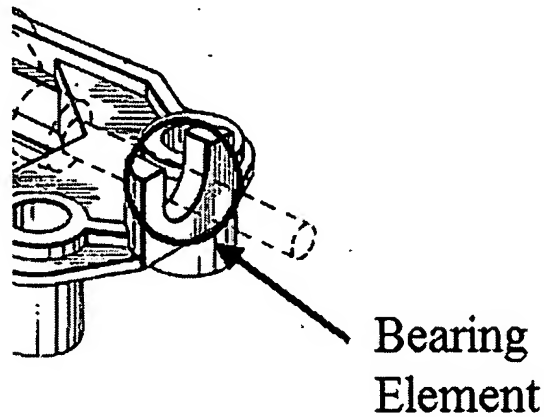
With respect to claim 5, Maher teaches the brush holder plate of claim 3, wherein the holding means frees the brushes in the final assembly position (with the use of an external tool (Col. 3, Lines 6-15)).

With respect to claim 9, Maher teaches the brush holder plate of claim 1, wherein the cartridges are formed such that they can be fixed to the brush holder plate, in particular by way of locking tabs (Fig. 2, #28), in the final assembly position.

With respect to claim 10, Maher teaches an electric motor comprising a casing (Fig. 1, #10), an armature shaft (as seen in Fig. 1), a commutator (Fig. 1, #14), and a brush holder plate (Fig. 1, #16), wherein the brush holder plate comprises cartridges (Fig. 1, #20) and brushes (Fig. 3, #34) guided in the cartridges, wherein the guidance of the brushes takes place under spring loading in the radial direction towards a central aperture in the brush holder plate, wherein the cartridges are disposed such that they can be displaced on the brush holder plate from a radially outer preassembly position into a radially inner position, and wherein the contact faces of the brushes act against the commutator under spring loading in the final assembly position (as seen in Fig. 3).

With respect to claim 11, Maher teaches the electric motor of claim 10, wherein the armature shaft is supported against the casing via a bearing element (which inherently exists in the position as shown below) of the diameter a ,

wherein the diameter b of the aperture is greater than the diameter a of the bearing element.



With respect to claim 12, Maher teaches the electric motor of claim 11, wherein the armature shaft is preassembled with the bearing element, that the brush holder is plate is inserted in the casing, wherein the cartridges are in the preassembly position, that the bearing element is guided through the aperture, and that the cartridges are displaced radially inwards into the final assembly position.

With respect to claim 13, Maher teaches the motor of claim 12, wherein the brushes are held in the radially outer position in the cartridges by the holding means during assembly and are freed upon displacing the cartridges into the final assembly (by an external tool).

Allowable Subject Matter

Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

With respect to claim 6, while the prior art does teach all of the material in claim 3, it does not teach the material of claim 3 including spring tongues connected to the cartridges having free ends that act on the brushes in the preassembly position.

Claims 7 & 8 are dependent upon claim 6.

Response to Arguments

Applicant's arguments filed 8/12/2005 have been fully considered but they are not persuasive.

In response to applicant's argument that Maher does not teach a brush holder plate that supports a plurality of cartridges, it is noted that the citation of the element #30 was meant to encompass not only the tab at the front of one side of the brush holder plate, but all of the integrally connected brush holder plate structure which includes Fig. 1 elements 30, 18, 16, and to some degree 10, and, this structure does in fact support at least two cartridges.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erik D. Preston whose telephone number is 571-272-8393. The examiner can normally be reached on Monday through Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2834

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



09/01/2005



DARREN SCHUBERG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800